

**Summary of ICCR Turbine Technology Workshop
Stationary Combustion Turbine Workgroup
Long Beach, California
July 25, 1997**

Decisions:

- There is general agreement that if HAP emissions are significant, organic HAP concentrations from gas turbines will be higher at low loads than at high loads and may also be higher for some units using high rates of water/steam injection for NO_x control.
- If hydrocarbon emissions are negligible or zero then organic HAP emissions are expected to be negligible or zero.
- It is not clear if CO is a good direct indicator for trace organic HAPs for all conditions. CO is not expected to be a direct indicator for inorganic HAPs for any conditions.
- Catalyst technology for organic HAPs reduction from gas turbines may be available (e.g. oxidation catalyst).

Suggestions and Items to be Considered:

- Present similar technical information discussed during the workshop to the ICCR CC.
- The WG needs to determine how much emissions data are sufficient to confirm that gas turbines are clean engines.
- Additional funding may be needed to develop emissions and controls data.
- In determining turbine emissions, it is important to consider the turbine age (which would have an effect on inlet temperature and compression ratio) and size.

Action Items:

- S. Roy will discuss with B. Lott of GRI the possibility of obtaining supporting material regarding dioxin emissions from turbines.
- The WG will obtain the risk assessment studies conducted by GRI and EPRI for turbines.
- R. Mueller will present to the WG a revised SCR performance curve (NO_x-Conversion and Ammonia Slip vs. Alpha) based on 42 ppmv NO_x inlet concentration.
- The WG will request R. Seeker of EER to provide some additional information on Dioxin and potentially, an additional presentation to the CC. Subsequent to the Workshop, Ted Guth has begun discussions on this with R. Seeker.
- The WG will obtain additional data (operating parameters and emissions data) for new and existing gas turbines.